

From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rules 44bis.3(c) and 72.2)

To:

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Date of mailing (day/month/year)

08 February 2007 (08.02.2007)

Applicant's or agent's file reference  
OZ 00204-WO**IMPORTANT NOTIFICATION**International application No.  
PCT/EP2005/051212International filing date (day/month/year)  
16 March 2005 (16.03.2005)

Applicant

Kuraray Specialties Europe GmbH et al

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

**2. Transmittal of the copy of the translation to the designated or elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

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The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

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**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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**TRANSLATION**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>OZ 00204-WO</b>	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/EP2005/051212</b>	International filing date (day/month/year) <b>16.03.2005</b>	Priority date (day/month/year) <b>17.03.2004</b>
International Patent Classification (IPC) or national classification and IPC <b>B29C47/74, B29C47/04</b>		
Applicant <b>Kuraray Specialities Europe GmbH</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of _____ sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>13</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report																								
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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/051212

Box No. 1

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* 1-11 received by this Authority on 18.01.2006 with letter of 13.10.2005
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1-10 received by this Authority on 18.01.2006 with letter of 13.10.2005
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* 1/3-3/3 received by this Authority on 18.01.2006 with letter of 13.10.2005
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/051212

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
1. Statement	
Novelty (N)	Claims <u>1-10</u> YES Claims _____ NO
Inventive step (IS)	Claims _____ YES Claims <u>1-10</u> NO
Industrial applicability (IA)	Claims <u>1-10</u> YES Claims _____ NO
2. Citations and explanations (Rule 70.7)	
1	Reference is made to the following documents:  D1: US 5 332 649 A (BLECKMANN ET AL) 26 July 1994 (1994-07-26) D2: US 5 190 706 A (KNAUS ET AL) 2 March 1993 (1993-03-02) D3: DE 28 35 139 A1 (GENERAL ENGINEERING CO. LTD; PLCV LTD., LONDON, GB) 1 March 1979 (1979-03-01) D4: WO 96/28504 A (E.I. DU PONT DE NEMOURS AND COMPANY; HUSSEY, ANITA, P. + EF; KEANE, JOH) 19 September 1996 (1996-09-19)  2 INDEPENDENT CLAIM 1  2.1 The following comments relate to requirements of PCT Article 33(2) and take into account the comments related to Box VIII. Where necessary, underlining is used to indicate the lack of clear definition.  Document D1 discloses (and the references between parentheses relate to said document): a method for coextrusion of at least two polymeric melt streams having different composition, comprising the following steps in a process:  a) melting of a polymer material  b) dividing the melt into at least two melt streams  c) <u>metering</u> additives into at least one melt stream and

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/051212

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

- d) bringing the melt streams together with coextrusion in one or more extrusions dies, cf. document D1, column 4, lines 4-29 and figure.

The subject matter of claim 1 therefore differs from the known processes in that the polymer material is based on polyvinyl butyral or on a terpolymer having ethylene units, vinyl acetate units and vinyl alcohol units.

Claim 1 is therefore novel under PCT Article 33(2).

The problem addressed by the present invention can therefore be considered that of providing a process in which the changeover times for additives are reduced, cf. page 3, paragraph [0009].

Because the originally submitted description and dependent claims disclose PVB and terpolymers as equivalent alternatives to other polymers with regard to this problem, the Examining Body is unable to confirm the presence of inventive step in the present solution, see also PCT Guidelines 5.18.

The feature "that the polymer material is based on polyvinyl butyral or on a terpolymer having ethylene units, vinyl acetate units and vinyl alcohol units" appears rather to be one of several obvious possibilities from which a person skilled in the art would choose according to the circumstances, without thereby being inventive, cf. PCT Guidelines 13.14(e). See Box VIII, 1.1.

The requirement of PCT Article 33(3) is therefore not met.

- 2.2 Documents D2 and D3 also disclose steps a) - d) according to point 2.1 in a process, cf. passages cited in the search report.

3 DEPENDENT CLAIMS 2-10

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/051212

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

Claims 2-10 appear not to contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for inventive step.

- 3.1 The fact that melt stream is conducted through a dynamic or static mixing section, according to claim 2, is known from documents D1, cf. column 4, lines 18-20 and D3, page 13, lines 8-13.
- 3.2 Incorporation of additives by mixing via a dynamic mixer, according to claim 3, is known from document D3, cf. page 13, lines 8-13.
- 3.3 Filtration of melts according to claims 4 and 5 is known from document D4, cf. page 5, lines 13-16.
- 3.4 An extrusion die with a wedge-shaped or torpedo-shaped region, according to claim 6, is known from documents D1, cf. figure, and D2, cf. figure 3.
- 3.5 Incorporation of an additive by mixing according to claims 7 and 8 is known from document D1, cf. column 2, lines 56-64.
- 3.6 A process with two different colours according to claim 9 is known from document D2, cf. claim 1, and figures 4A and 4B.
- 3.7 A process for production of multicoloured films according to claim 10 is known from document D5, cf. column 1, lines 56-66 and figure 4.

## 4 INDUSTRIAL APPLICABILITY

Claims 1-10 refer to subject matter which meets the requirements of industrial applicability (PCT Article 33(4)).

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/051212

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. The alternatives are disclosed alongside one another and in equivalent manner in the original description and there is no preferred selection from the group of terpolymers and polyvinyl butyral, PCT Guidelines 13.14(e) (iv).
- 1.1 The term "metering" used in claim 1 and the amended description has been interpreted as "mixing" for the purposes of the procedure. It should be noted that the term "metering" introduces substantive matter which, contrary to PCT Article 19(2) goes beyond the disclosure in the international application as filed.
- 1.2 The term "and/or" used in claim 1 has been interpreted as having its widest meaning in this opinion for purposes of delimitation of the claims.
- 1.3 Similar considerations apply to dependent claims 2, 5, 7 and 8.